

A NEW RECORD GENUS TO CHINA WITH DESCRIPTION OF A NEW SPECIES (HYMENOPTERA, SPHECIDAE)

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Abstract *Parapsammophila* Taschenberg 1869, a new Chinese record genus is reported, and a new species *Parapsammophila vearinata* sp. nov., is described from Xinjiang, China in the present. The type specimens are deposited in the Insect Collection of Yunnan Agricultural University.

Key words Hymenoptera, Sphecidae, *Parapsammophila*, new record genus, new species

Parapsammophila Taschenberg (1869) is an Old World genus in the family Sphecidae (subfamily Ammophilinae), with 21 species of medium to large size wasps in the world (Gussakovskij 1930; Nurse 1903; Smith 1856; Tumer 1918). Kohl (1906) revised the species of the genus in the Palearctic Region, and his work is still one of the valuable references for the species identification. Roth (1928) provided keys to identification of Palearctic African Region forms. Bohart and Menke (1976) revised the genera of Sphecidae of the world and listed 19 species of *Parapsammophila* worldwide.

While studying the sphecid material collected in Xinjiang, China in 2006, a new record genus to China and a new species was found and it is described in the present paper. The morphological terms follow Bohart and Menke (1976).

Parapsammophila Taschenberg 1869 New record to China

Parapsammophila Taschenberg 1869: 469

Carabphex Rohwer 1922: 671.

Type species *Parapsammophila miles* Taschenberg 1869

The main diagnostic characters of *Parapsammophila*: galea usually short and not extending beyond middle of stipes when folded; male clypeus usually rounded or truncate; tarsus I of female foreleg strongly asymmetrical, its outer apex prolonged; petiole socket broadly bounded ventrally by T-shaped propodeal stemum; episternal sulcus not passing through scrobes; tarsi usually with plantulae; claw usually with two basal teeth.

Parapsammophila vearinata sp. nov. (Figs 1-9)

Female. Body length 26.5 mm. Whole body black with basal half of mandible, front part of

clypeus, antennal scape, base of flagellum I medially, legs largely, pronotal lobe, tegula, abdomen except base of tergum I reddish brown; wings pale yellowish brown; veins pale yellowish brown; clypeus laterally and lower areas, frons, gena, pronotum laterally including pronotal lobe, scutum posterolaterally, propectus, mesopleuron and propodeum posterolaterally covered with dense appressed silver hair; collar, anterior half of scutum, posterior half of scutellum and metanotum, medial region of propodeum, stema of thorax and coxae with sparse appressed silver hair; head and thorax with long erect white hair; abdominal petiole dorsally with pubescence.

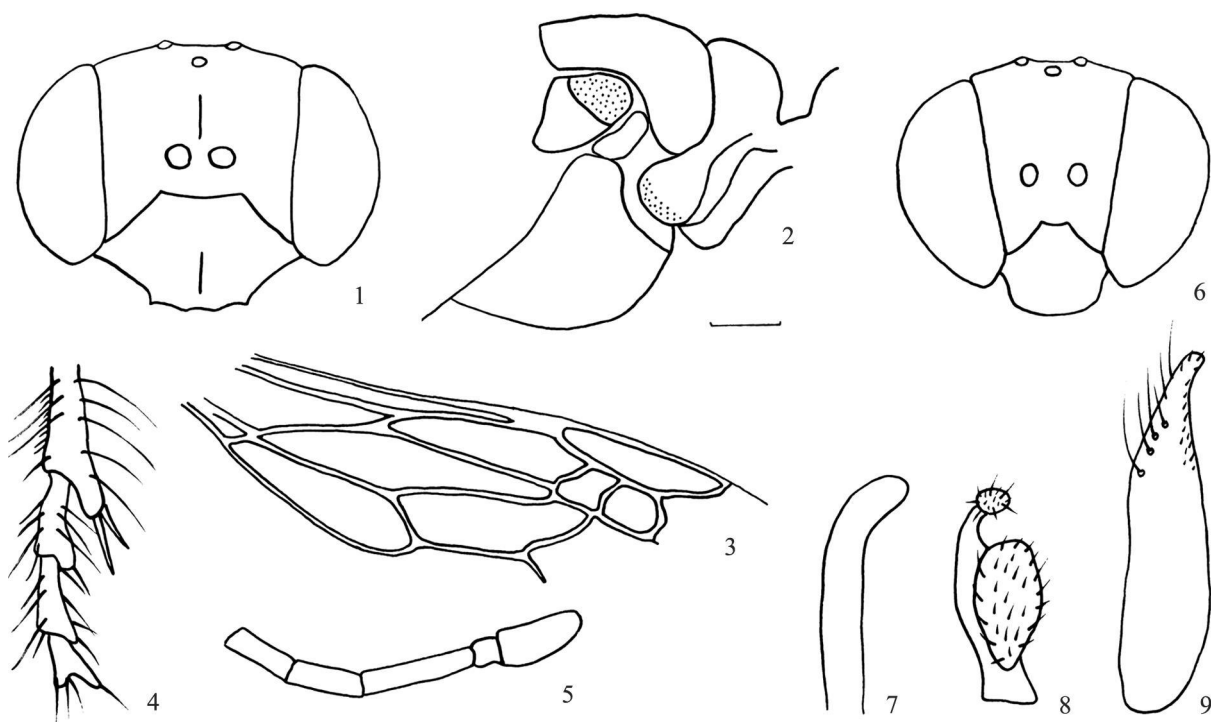
Clypeus densely punctate; disc slightly bulging, anterior margin with two lateral teeth, medially roughly spherical protuberance with shallow median furrow (Fig. 1). Vertex sparsely punctate without supra-antennal projection. Postocellar diameter (ODD) : postocellar distance (POD) : ocellar distance (OOD) : interocular distance at anterior ocellus (IODP) : interocular distance at clypeus (IODC) = 1.0 : 2.4 : 2.8 : 9.6 : 9.4. Relative length of antennal pedicel : flagellomere I : II : III : VIII : IX : X = 1.0 : 4.4 : 2.4 : 2.4 : 2.0 : 1.8 : 1.8.

Pronotal collar (Fig. 2) length : width = 21 : 48, with deep median furrow; Scutum with complete admedian line, sides of anterior half transversely rugose-striate and punctate; posterior half sparsely punctate; anterior half scutellum sparsely punctate; posterior half covered by appressed silver hair. Metanotum sparsely punctate. Propodeal enclosure with median carina, surface coarsely obliquely rugose-striate laterally. Mesopleuron with episternal sulcus, other sculptures covered by dense appressed silver hair. Forewing marginal cell rounded apically (Fig. 3).

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Figs 1-9. *Parapsammophila vearinata* sp. nov. 1-5. Female 6-9. Male 1. Head, front view. 2. Pronotal collar and scutum, lateral view. 3. Part of fore wing. 4. Fore tarsi I-IV, lateral view. 5. Antennal joints 1-5 lateral view. 6. Head, front view. 7. Penis valves, lateral view. 8. Volsella, ventral view. 9. Gonostyli, lateral view. Scale bars: 1 = 1.12 mm, 2-3 = 1 mm, 4-5 = 1.65 mm, 6 = 1.32 mm, 7-8 = 3.92 mm, 9 = 3.28 mm.

Tarsi with bigger plantulae. Claw with two basal teeth. Foretarsus strongly asymmetrical with rake of long spines (Fig. 4). Midtibia with one spur. Hind leg relative length of tibia: tarsus I : II : III = 100: 52: 26. Length of abdominal petiole: tergite I : II = 68: 60: 45.

Male. Body length 23 mm. Similar to female. Mandible basal anterior margin of clypeus legs largely reddish brown, but terga III-VII with black spots. Antennal flagella VII-X medially reddish brown, midtarsi IV-V and hindtarsi IV-V pale brown to brown. Forecoxa with sparse appressed silver hair. Anterior margin of clypeus emarginate medially (Fig. 6), tip reflexed. Vertex sparsely punctate, gena obliquely rugose-striate and punctate. ODD: POD: OOD: IODP: IODC = 1.0: 2.8: 2.5: 9.0: 5.8. Relative length of antennal pedicel: flagellomere I : II : III: VIII: IX: X = 1.0: 3.8: 2.5: 2.8: 2.0: 1.5: 1.5. Pronotal collar length: width = 14: 38, anterior slope transversely rugose-striate and punctate, without median furrow. Scutum transversely rugose-striate and punctate, without distinct admedian line. Scutellum and metanotum sparsely punctate. Hind leg relative length of tibia: tarsus I : II : III = 110: 60: 30: 22. Length of abdominal petiole: tergite I : II = 60: 42: 38. Genitalia with penis valves as Fig. 7, volsella as Fig. 8 and gonostyli as Fig. 9.

The new species can be distinguished from the

similar species *P. foleyi* (de Beaumont 1956) and other species of the genus by the following combination of characters: female anterior margin of clypeus emarginate medially (Fig. 1), without median carina; front part of mesosternum normal; foretarsus more asymmetrical (Fig. 4); midtibia with one spur; basal half of mandible; front part of clypeus; antennal scape; base of flagellum I medially; leg largely reddish brown; tegula; abdomen largely reddish brown; male flagella VII-X reddish brown and different shape of male genitalia (Figs. 7-9).

Holotype ♀, Caian Oilfield, Xinjiang Uygur Autonomous Region, China, 3 June 2006, coll. LI Ting-jin. Paratype 1 ♂, same data as holotype.

Etymology. The new species name is derived from Latin *ve* (= absent) and *carinata* (= carinate, also derived from Latin), meaning the species with clypeus without median carina.

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中国沙泥蜂亚科一新纪录属及一新种记述 (膜翅目, 泥蜂科)

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摘 要 记述了泥蜂科沙泥蜂亚科 Ammophilinae 中国 1 新纪录属: 异足沙泥蜂属 *Parapsammophila* Taschenberg 1869, 及该属的 1 个新种, 无脊异足沙泥蜂 *Parapsammophila vearinata* sp. nov. 新种与 *P. foley* (de Beaumont) 相似, 但前者雌性的唇基前缘中部具凹缺, 唇基中部无中纵脊; 中胸腹板前面正常; 前足跗节不对称性较后者强; 中足胫节具 1 距; 上颚基

关键词 膜翅目, 泥蜂科, 新纪录属, 异足沙泥蜂属, 新种.
中图分类号 969.555.3

半部; 唇基前部; 触角柄节; 鞭节 I 节基部内侧、3 对足除基节基部外、前胸背板侧叶、翅基片、腹部除背板 I 基部外为红黄色; 雄性触角鞭节 VII~X 节内侧为暗红色; 外生殖器阳茎端突外缘无齿等特征与后者明显有别。模式标本均采自我国新疆。模式标本保存在云南农业大学昆虫标本室。

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